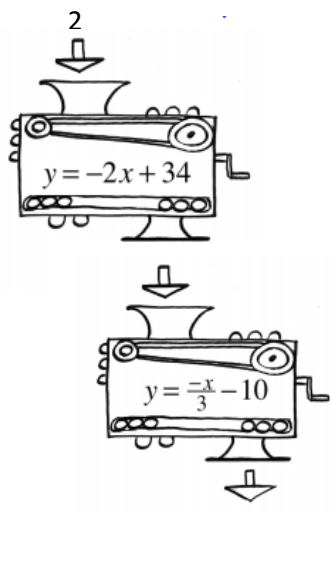


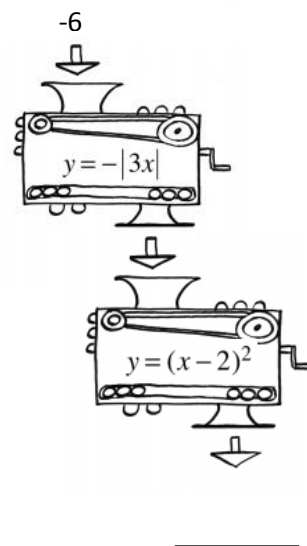
Name(s) _____ 1.1.1 Function Machines (Show all work!)

Given the initial input, determine the final output for the function machines below.

1.



2.



Given $f(x) = -\frac{2}{3}x + 3$ and $g(x) = 3x^2 + 2x - 5$

SHOW ALL WORK!

3. Calculate $f(3) =$ _____

4. Solve $f(-6) =$ _____

5. Calculate $g(-3) =$ _____

6. Solve $g(-1) =$ _____.

7. Solve $g(x) = 0$. $x =$ _____

8. Solve $g(x) = 5$ $x =$ _____

9. Use the Zero Product Property and factoring, when necessary, to solve for x .

SHOW ALL WORK!

a. $(x+13)(x-7) = 0$

b. $(2x+3)(3x-7) = 0$

c. $x(x-3) = 0$

d. $x^2 - 5x - 6 = 0$

e. $x^2 - 2x - 35 = 0$

f. $3x^2 + 14x - 5 = 0$